

STATEMENT OF BASIS

as required by LAC 33:IX.3109, for draft **Louisiana Pollutant Discharge Elimination System Permit No. LA0124788; AI 166844; PER20090001** to discharge to waters of the **State of Louisiana** as per LAC 33:IX.2311.

The **permitting authority** for the Louisiana Pollutant Discharge Elimination System (LPDES) is:

Louisiana Department of Environmental Quality
Office of Environmental Services
P. O. Box 4313
Baton Rouge, Louisiana 70821-4313

- I. **THE APPLICANT IS:** Daniel Wingate
 Daniel's Construction
 12006 Branch Highway
 Church Point, LA 70525

- II. **PREPARED BY:** Eura DeHart

- DATE PREPARED:** October 29, 2009

- III. **PERMIT ACTION:** Issue LPDES permit LA0124788, AI 166844; PER20090001

LPDES application received: August 27, 2009 -

EPA has not retained enforcement authority.

IV. **FACILITY INFORMATION:**

- A. The application is for the discharge of treated wastewater from the processing of sewage sludge by Daniel Wingate at the Daniel's Construction facility. The facility will receive sewage sludge (including but not limited to domestic septage and port-o-let wastes) via pump trucks into a sludge tank where it will be liquefied and then routed to a 10,000 gpd mechanical treatment plant for treatment. The solids/sludge from the treatment unit will be dried on sludge drying beds and will be stored for a maximum of six months prior to disposal at a permitted landfill. Disinfection is by chlorination.

- B. The facility is located at 326 Milligan Road in Branch, Acadia Parish.

- C. The treatment facility consists of a 10,000 GPD extended aeration sewage treatment plant.

D. Outfall 001

Discharge Location: Latitude 30° 20' 13" North
 Longitude 92° 14' 07" West

Description: treated wastewater generated by the processing of sewage sludge

Estimated Flow: 0.005 MGD

Type of Flow Measurement which the facility will be using:
 Combination totalizing meter/continuous recorder

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V. RECEIVING WATERS:

The discharge is into an unnamed ditch, thence into Bayou Wikoff, thence into Bayou Plaquemine Brule, thence into the Mermentau River in segment 050201 of the Mermentau River Basin. This segment is not listed on the 303(d) list of impaired waterbodies.

The designated uses and degree of support for Segment 050201 of the Mermentau River Basin are as indicated in the table below^{1/}:

Degree of Support of Each Use						
Primary Contact Recreation	Secondary Contact Recreation	Propagation of Fish & Wildlife	Outstanding Natural Resource Water	Drinking Water Supply	Shell fish Propagation	Agriculture
Not Supported	Not Supported	Not Supported	N/A	N/A	N/A	Full

^{1/}The designated uses and degree of support for Segment 050201 of the Mermentau River Basin are as indicated in LAC 33-IX.1123.C.3, Table (3) and the 2006 Water Quality Management Plan, Water Quality Inventory Integrated Report, Appendix A, respectively.

VI. ENDANGERED SPECIES:

The receiving waterbody, Subsegment 050201 of the Mermentau River Basin, is not listed in Section II.2 of the Implementation Strategy as requiring consultation with the U. S. Fish and Wildlife Service (FWS). This strategy was submitted with a letter dated November 17, 2008 from Rieck (FWS) to Nolan (LDEQ). Therefore, in accordance with the Memorandum of Understanding between the LDEQ and the FWS, no further informal (Section 7, Endangered Species Act) consultation is required. It was determined that the issuance of the LPDES permit is not likely to have an adverse effect on any endangered or candidate species or the critical habitat. The effluent limitations established in the permit ensure protection of aquatic life and maintenance of the receiving water as aquatic habitat.

VII. HISTORIC SITES:

The discharge will be from a new facility. In a letter dated, October 27, 2009, LDEQ submitted facility information to the State Historic Preservation Officer (SHPO) to determine whether construction-related activities could potentially affect sites or properties on or eligible for listing on the National Register of Historic Places. Any areas of concern identified by SHPO will be resolved prior to issuance of a final permit.

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VIII. PUBLIC NOTICE:

Upon publication of the public notice, a public comment period shall begin on the date of publication and last for at least 30 days thereafter. During this period, any interested persons may submit written comments on the draft permit and may request a public hearing to clarify issues involved in the permit decision at this Office's address on the first page of the statement of basis. A request for a public hearing shall be in writing and shall state the nature of the issues proposed to be raised in the hearing.

Public notice published in:

Local newspaper of general circulation

Office of Environmental Services Public Notice Mailing List

For additional information, contact:

Mr. Eura DeHart
Water Permits Division
Department of Environmental Quality
Office of Environmental Services
P. O. Box 4313
Baton Rouge, Louisiana 70821-4313

IX. PROPOSED PERMIT LIMITS:

Bayou Plaquemine Brule -Headwaters to Bayou Des Cannes, is not listed on LDEQ's Final 2006 303(d) List as impaired. However, this subsegment was previously listed as impaired for Mercury, Phosphorus, Organic Enrichment/Low DO, Pathogen Indicators, Turbidity, Suspended Solids/Turbidity/Siltation, TDS, Ammonia, and Fipronil, for which TMDLs have been developed. The Department of Environmental Quality-reserves the right to impose more stringent discharge limitations and/or additional restrictions in the future to maintain the water quality integrity and the designated uses of the receiving water bodies based upon additional TMDLs and/or water quality studies. The DEQ also reserves the right to modify or revoke and reissue this permit based upon any changes to the established TMDLs for this discharge, or to accommodate for pollutant trading provisions in approved TMDL watersheds as necessary to achieve compliance with water quality standards.

The following TMDLs have been established for Subsegment 050201:

MERCURY TMDLS FOR SUBSEGMENTS WITHIN MERMENEAU AND VERMILION-TECHE RIVER BASINS January 19, 2001 - Per the TMDL, point source loading of mercury into waters of the Mermentau and Vermilion-Teche basins is relatively small, approximately 0.6% and 1.5% of existing total loads for the Mermentau and Vermilion-Teche basins, respectively. The TMDL implementation plan will identify point source discharges which, individually or collectively, may represent significant sources of mercury. Those facilities identified as having reasonable potential for exceeding narrative and/or numeric standards for protection of human health will be required to monitor mercury in their discharges. Mercury loading for these facilities will be controlled through permit limits or through implementation of a mercury minimization plan (MMP). This facility is not expected to discharge mercury in any quantities. The discharges should not cause or contribute to further impairment in the receiving stream. As such, mercury limits and/or MMP requirements are not included in this permit. However, the facility will be required to conduct a metals analysis which includes mercury every 6 months; the permit includes a threshold limit for total mercury as a standard requirement for this facility type.

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BAYOU PLAQUEMINE BRULE TMDL FOR FECAL COLIFORM, January 19, 2001 - As per the TMDL, "...there will be no change in the permit requirements based upon a wasteload allocation resulting from this TMDL." Therefore, fecal coliform effluent limitations will be assigned according to state policy.

BAYOU PLAQUEMINE BRULE WATERSHED TMDL FOR DISSOLVED OXYGEN AND NUTRIENTS, November 1999 - Per the TMDL, "There are 66 known dischargers in this Subsegment, the majority of which are too small to have a significant impact." The expected discharge from this facility is 5,000 GPD. Therefore, standard BOD₅ limits have been applied and will address both the dissolved oxygen and nutrient impairments. Discharges compliant with these limitations should not contribute to further impairment of the receiving stream.

NOTE: Per the February 29, 2000 Delist (Federal Register Notice: Vol. 65, Num. 173, pages 54032-54034), assessment of new data and information shows this segment is meeting the water quality standards for phosphorus. Requirements for Total Phosphorus are not included in this permit.

TOTAL MAXIMUM DAILY LOAD (TMDL) For TSS, Turbidity, and Siltation for the Mermentau River Basin, May 2001 - Per the TMDL, "...point source loads are so small as to be insignificant, and because effective policies are in place to limit TSS discharges, no specific reductions from point sources are required." TSS limits for the facility are assigned according to state policy.

NOTE: Per the February 29, 2000 Delist (Federal Register Notice: Vol 65, Num. 173, pages 54032-54034), assessment of new data and information shows this segment is meeting water quality standards for turbidity. Requirements for turbidity are not included in this permit.

BAYOU PLAQUEMINE BRULE TMDL FOR AMMONIA (May 3, 2001) - Bayou Plaquemine Brule was listed on the October 28, 1999 Court Ordered §303(d) list for ammonia by virtue of its listing in the State of Louisiana's 1993 Nonpoint Source (NPS) Report. This subsegment was listed as "impacted by nonpoint source pollution." Per the TMDL, "The Bayou Plaquemine watershed includes 66 known dischargers, Many of these dischargers are small and need not be included in a model of this scale." Therefore, ammonia limits are not included in this permit.

BAYOU PLAQUEMINE BRULE TMDL FOR TOTAL DISSOLVED SOLIDS (TDS) (April 17, 2003) - The Bayou Plaquemine watershed includes 66 known dischargers, according to LDEQ's permit tracking system (Berger et al., 1999). Many of these dischargers are small and/or adequately distant from Bayou Plaquemine Brule and assumed to have a minimal effect on water quality in this subsegment. Sixteen larger facilities discharging sanitary wastewater directly into Bayou Plaquemine Brule and its tributaries were specifically included in this model. No TDS limits are included in this permit.

Total Maximum Daily Load (TMDL) for the Pesticide Fipronil in the Mermentau River Basin - As per the TMDL for the Pesticide Fipronil in the Mermentau River Basin, "there are no known point sources for fipronil in the Mermentau River Basin." Effluent from this facility is not expected to contain fipronil as its use is limited to rice farming. Therefore, fipronil limits are not included in this permit.

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Final Effluent Limits:**OUTFALL 001**

Final limits shall become effective on the effective date of the permit and expire on the expiration date of the permit.

Effluent Characteristic	Monthly Avg.	Daily Max.	Basis
BOD ₅	30 mg/l	45 mg/l	Limits are set through BPJ and are consistent with the Statewide Sanitary Effluent Limitations Policy (SSELP) for sewage treatment facilities of this size.
TSS	30 mg/l	45 mg/l	Since there is no numeric water quality criterion for TSS, and in accordance with the current Water Quality Management Plan, the TSS effluent limitations shall be based on a case-by-case evaluation of the treatment technology being utilized at a facility. Therefore, a Technology Based Limit has been established through Best Professional Judgement for the type of treatment technology utilized at this facility.

*Concentration limits are used in accordance with LAC 33:IX.2709.F.1.b which states that mass limitations are not necessary when applicable standards and limitations are expressed in other units of measurement. LAC 33:IX.709.B references LAC 33:IX.711 which express BOD₅ and TSS in terms of concentration.

Other Effluent Limitations:**1) Fecal Coliform**

The discharge from this facility is into a water body which has a designated use of Primary Contact Recreation. According to LAC 33:IX.1113.C.5.b.i, the fecal coliform standards for this water body are 200/100 ml and 400/100 ml. Therefore, the limits of 200/100 ml (Monthly Average) and 400/100 ml (Daily Maximum) are proposed as Fecal Coliform limits in the permit. These limits are being proposed through Best Professional Judgement in order to ensure that the waterbody standards are not exceeded, and due to the fact that existing facilities have demonstrated an ability to comply with these limitations using present available technology.

2) pH

The pH shall not be less than 6.0 standard units nor greater than 9.0 standard units at any time. (Limits as established through BPJ considering BCT for similar waste streams in accordance with LAC 33:IX.5905.C.).

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3) Solids and Foam

There shall be no discharge of floating solids or visible foam in other than trace amounts in accordance with LAC 33:IX.1113.B.7.

4) Metals Threshold Values

This Office has established the following list of metals with threshold limits intended as action levels. Should a substance exceed the established threshold limit, the permittee shall notify the Office of Environmental Compliance of the exceedence, in writing, within five (5) days. At this time, the facility shall institute a study to determine the source of the substance. Within sixty (60) days of written notification the permittee shall submit a written account of the nature of the study and the measures being taken to secure abatement. Failure to comply with any provision of this paragraph shall constitute a violation of this permit. The Department reserves the right to establish effluent limitations for any of the parameters listed below based upon the results of submitted analyses.

a. 40 CFR Part 136 Analytical Requirements

Unless otherwise specified in this permit, monitoring shall be conducted according to analytical, apparatus and materials, sample collection, preservation, handling, etc., procedures listed at 40 CFR Part 136 (in its entirety as per LAC 33:IX.2531, Subchapter N, Adoption by Reference) in effect on the effective date of this permit. Appendices A, B, and C to Part 136 are specifically referenced as part of this requirement. Amendments to 40 CFR Part 136 promulgated after the effective date of this permit shall supersede these requirement as applicable.

The permittee may use other EPA approved test methods that provide more sensitive test results than those referenced in the permit.

b. If any individual analytical test result is less than the minimum quantification level (MQL) listed below, a value of zero (0) may be used as the test result for those parameters.**c. Metal List**

Parameter	Threshold Limit (ug/l)	MQL Required (ug/l)
Total Arsenic	100	10
Total Cadmium	100	1
Total Copper	500	10
Total Lead	150	5
Total Mercury	10	0.2
Total Molybdenum	50	10
Total Nickel (freshwater)	500	40
Total Selenium	100	2
Total Zinc	500	20

X. PREVIOUS PERMITS:

No previous permits have been issued for the facility.

XI. ENFORCEMENT AND SURVEILLANCE ACTIONS:**A) Inspections**

A review of the files indicates no inspections have been conducted at the facility.

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B) Compliance and/or Administrative Orders

A review of the files indicates no enforcement actions have been administered against this facility.

C) DMR Review

A review of the files revealed no DMRs for this new facility.

XII. ADDITIONAL INFORMATION:

The Louisiana Department of Environmental Quality (LDEQ) reserves the right to impose more stringent discharge limitations and/or additional restrictions in the future to maintain the water quality integrity and the designated uses of the receiving water bodies based upon additional water quality studies and/or TMDL's. The LDEQ also reserves the right to modify or revoke and reissue this permit based upon any changes to established TMDL's for this discharge, or to accommodate for pollutant trading provisions in approved TMDL watersheds as requested by the permittee and/or as necessary to achieve compliance with water quality standards. Therefore, prior to upgrading or expanding this facility, the permittee should contact the Department to determine the status of the work being done to establish future effluent limitations and additional permit conditions.

In accordance with LAC 33:IX.2903, this permit may be modified, or alternatively, revoked and reissued, to comply with any applicable effluent standard or limitations issued or approved under sections 301(b)(2)(c) and (D); 304(b)(2); and 307(a)(2) of the Clean Water Act, if the effluent standard or limitations so issued or approved:

- a) Contains different conditions or is otherwise more stringent than any effluent limitation in the permit; or
- b) Controls any pollutant not limited in the permit; or
- c) Requires reassessment due to change in 303(d) status of waterbody; or
- d) Incorporates the results of any total maximum daily load allocation, which may be approved for the receiving water body.

At present, the **Monitoring Requirements, Sample Types, and Frequency of Sampling** as shown in the permit are as follows:

<u>Effluent Characteristics</u>	<u>Monitoring Requirements</u>	
	<u>Measurement Frequency</u>	<u>Sample Type</u>
Flow	1/week	Measure
BOD ₅	1 / month	Grab
Total Suspended Solids	1 / month	Grab
Fecal Coliform Bacteria	1 / month	Grab
pH	1 / month	Grab
Metals Analysis	1/6 months	Grab

XIII. TENTATIVE DETERMINATION:

On the basis of preliminary staff review, the Department of Environmental Quality has made a tentative determination to issue a new permit for the discharge described in this Statement of Basis.

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XIV. REFERENCES:

Louisiana Water Quality Management Plan / Continuing Planning Process, Vol. 8, "Wasteload Allocations / Total Maximum Daily Loads and Effluent Limitations Policy," Louisiana Department of Environmental Quality, 2005.

Louisiana Water Quality Management Plan / Continuing Planning Process, Vol. 5, "Water Quality Inventory Section 305(b) Report," Louisiana Department of Environmental Quality, 1998.

Louisiana Administrative Code, Title 33 - Environmental Quality, Part IX - Water Quality Regulations, Chapter 11 - "Louisiana Surface Water Quality Standards," Louisiana Department of Environmental Quality, 2004.

Louisiana Administrative Code, Title 33 - Environmental Quality, Part IX - Water Quality Regulations, Subpart 2 - "The LPDES Program," Louisiana Department of Environmental Quality, 2004.

Low-Flow Characteristics of Louisiana Streams, Water Resources Technical Report No. 22, United States Department of the Interior, Geological Survey, 1980.

Index to Surface Water Data in Louisiana, Water Resources Basic Records Report No. 17, United States Department of the Interior, Geological Survey, 1989.

LPDES Permit Application to Discharge Wastewater, Daniel Wingate, Daniel's Construction, August 27, 2009.